



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

NOV 28 1996
RECEIVED

In re Application of

SCHADE et al.

Serial No. 08/325,219

Filed: October 21, 1994

Group Art Unit: 1505

Examiner: Cheng

For: THE USE OF COPOLYMERS OF CARBOXYLIC ACIDS AND LONG-CHAIN
COMPOUNDS WITH ISOLATED C-C MULTIPLE BONDS AS THICKENERS
OR DISPERSANTS

I hereby certify that this correspondence
is being deposited with the United States
Postal Service as first class mail in an
envelope addressed to Commissioner of
Patents and Trademarks, Washington, D.C.
20231, on:

Date of Deposit NOVEMBER 19, 1996

Perfor Making Deposit MALCOLM J. MACDONALD

Signature

Date of Signature NOVEMBER 19, 1996

BRIEF ON APPEAL

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Pursuant to 37 CFR §§ 1.191(a) and 1.192, appellants present
herewith their brief on appeal.

REAL PARTY IN INTEREST

The name of the real party in interest of this application
is BASF AKTIENGESELLSCHAFT located at 67056 Ludwigshafen,
Germany.

RELATED APPEALS AND INTERFERENCES

To appellants' knowledge and belief, there are no
interferences or other appeals which will directly affect or be
directly affected by or have a bearing on the Board's decision in
this application.

STATUS OF THE CLAIMS

Claims 10-15 and 17, on appeal, stand finally rejected under
35 USC §102(b) as being anticipated by George (EP 047,009) and
claims 10, 12-13, 15, and 17 stand finally rejected under 35 USC

§102(b) as being anticipated by Blank (U.S. Patent No. 3,755,272).

STATUS OF AMENDMENTS

No amendments have been filed in this application after the final rejection.

SUMMARY OF INVENTION

Appellants' invention is directed to a cosmetic or pharmaceutical composition comprising, as a thickener or dispersant, an effective amount of a copolymer obtained by the free-radical polymerization of

A) 50 - 99.9% by weight of an olefinically unsaturated C₃-C₅-monocarboxylic acid, of an olefinically unsaturated C₄-C₈-dicarboxylic acid or of its anhydride or a mixture of such carboxylic acids or anhydrides with

B) 0.1 - 50% by weight of one or more long-chain compounds with isolated C-C multiple bonds from the group comprising

- (1) mono- or polyunsaturated C₈-C₃₀-monocarboxylic acids which may have additional hydroxyl groups, as well as their alkali metal and alkaline earth metal salts, alkyl esters, amides, sorbitan esters, glycerol esters or polyglycerol esters,
- (2) mono- or polyunsaturated aliphatic C₈-C₃₀-amines,
- (3) mono- or polyunsaturated C₈-C₃₀-alcohols as well as their esters with saturated C₁-C₄-monocarboxylic acids,
- (4) C₈-C₃₀-alkyl vinyl ethers which may contain up to 25 alkylene oxide units incorporated, and
- (5) terminal and internal C₁₁-C₃₀-alkenes,

C) 0 - 49.9% by weight of other copolymerizable monomers and

D) 0 - 10% by weight of one or more compounds with at least two olefinically unsaturated groups in the molecule as crosslinkers,

(Specification, p.2, lines 11-46). The new composition overcomes

disadvantages associated with toxicity and instability inherent in prior art compositions (p.2, lines 1-9).

ISSUES

I. Whether the examiner erred in rejecting claims 10-15 and 17 under 35 USC § 102(b) as being anticipated by George.

II. Whether the examiner erred in rejecting claims 10, 12-13, 15, and 17 under 35 USC § 102(b) as being anticipated by Blank.

The references relied upon by the examiner as evidence of anticipation are:

1. George, European Patent No. 047,009, published March 10, 1982.
2. Blank, U.S. Patent No. 3,755,272, published August 28, 1973.

GROUPING OF THE CLAIMS

Claim 14 does not necessarily stand or fall with claims 11, 12, 13, 15 and 17 with respect to Issue I, for the reasons given in the argument.

ARGUMENT

Ia. CLAIMS 10-15 AND 17 ARE NOT ANTICIPATED BY GEORGE UNDER 35 USC § 102(b).

The process disclosed by George does not anticipate the claimed invention because the instant composition would not be produced by the prior art process. In George, the resulting polymers are directed to the improvement of hydrophilic properties and are used, as indicated in the prior art specification (p.2, lines 6-9) for production of water-absorbent films and fibers in disposable diapers, medical-surgical products, and personal care products. By contrast, the present invention provides novel thickeners and dispersants for cosmetic and pharmaceutical purposes and requires hydrophobic qualities. The purpose of the instant product is to improve the stability of

the polymer against electrolytes and to retain particular thickening and dispersing action under strongly hydrolytic conditions. Therefore, the instant invention is distinguished from George by its novel characteristics. Viscosity is the important characteristic in the present invention whereas demand absorbency is vital to the prior art's success. Their difference in focus is due to the different functionalities of the two inventions: one is a water-absorbing material, the other is a thickener. The present product is patentable because the resulting product from George does not inherently possess the present product's ability for thickening or dispersing under hydrolytic conditions. Accordingly, the rejection of claims 10-15 and 17 on appeal is in error.

Ib. CLAIM 14 IS NOT ANTICIPATED BY GEORGE UNDER 37 USC § 102(b)

The reasons given above with respect to Issue Ia. apply equally herein. The arguments are strengthened as to claim 14, however, because the George reference does not disclose the specific crosslinking agents claimed in claim 14. Accordingly, it is submitted that the rejection of claim 14, on appeal, under 35 USC § 102(b) is in error.

II. CLAIMS 10, 12-13, 15 AND 17 ARE NOT ANTICIPATED BY BLANK UNDER 35 USC § 102(b).

The instant invention is not anticipated by Blank because the present product differs from the prior art both in physical characteristics and in its process. Under *In re Bridgeford*, 357 F.2d 679, 682, 149 U.S.P.Q. 55, 58 (C.C.P.A. 1966), the right to patent a product may be defined by the process of making it, if the product can be distinguished by its novel physical characteristics or by the terms of the process itself. The Blank copolymers are suitable for producing electrodisposition paints,

water-soluble surface coatings, floor coverings and textile-treating compositions with good mar resistance. The instant invention, however, results in a fine-particle powder which is suitable for preparation of very stable emulsions used in the production of thickeners or viscosity regulators for cosmetic or pharmaceutical preparations. Blank cannot anticipate the present invention because physically, the powdery form of the instant product is not conducive to the prior art's production of coatings. The powdery form is useful for purposes of regulating thickeners and dispersants as is its use in the present invention. There is no disclosure of or suggestion in Blank that the copolymer described therein should be used in cosmetic or pharmaceutical preparations. Therefore, Blank does not anticipate the claimed composition and the rejection of claims 10, 12-13, 15 and 17 is in error.


III. CONCLUSION

For reasons set forth above, it is respectfully urged that the examiner's decision in finally rejecting claims 10-15 and 17 is in error and should be reversed.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11.0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF



Malcolm J. MacDonald
Reg. No. 40,250

1101 Connecticut Ave., N.W.
Washington, D.C. 20036
(202) 659-0100

MJM/kd/kas

APPENDIX

10. A cosmetic or pharmaceutical composition containing as a thickener or dispersant an effective amount of a copolymer obtained by free-radical polymerization of

- A) 50 - 99.9% by weight of an olefinically unsaturated C₃-C₅-monocarboxylic acid, of an olefinically unsaturated C₄-C₈-dicarboxylic acid or of its anhydride or a mixture of such carboxylic acids or anhydrides with
- B) 0.1 - 50% by weight of one or more long-chain compounds with isolated C-C multiple bonds from the group comprising
- (1) mono- or polyunsaturated C₈-C₃₀-monocarboxylic acids which may have additional hydroxyl groups, as well as their alkali metal and alkaline earth metal salts, alkyl esters, amides, sorbitan esters, glycerol esters or polyglycerol esters,
 - (2) mono- or polyunsaturated aliphatic C₈-C₃₀-amines,
 - (3) mono- or polyunsaturated C₈-C₃₀-alcohols as well as their esters with saturated C₁-C₄-monocarboxylic acids,
 - (4) C₁₀-C₂₅-alkyl vinyl ethers, and
 - (5) terminal or internal C₁₆-C₃₀-alkenes,
- C) 0 - 49.9% by weight of other copolymerizable monomers and
- D) 0 - 10% by weight of one or more compounds with at least two olefinically unsaturated groups in the molecule as crosslinkers.

11. A composition as defined in claim 10, wherein the copolymers are obtained by free-radical polymerization of

- (A) 75 - 99.45% by weight of carboxylic acid component A,
- (B) 0.5 - 24.95% by weight of the long-chain compounds with isolated C-C multiple bonds B,
- (C) 0 - 24.45% by weight of other copolymerizable monomers and
- (D) 0.05 - 5% by weight of the crosslinker component D.

12. A composition as defined in claim 10, wherein the

copolymers have been prepared using acrylic acid, methacrylic acid or maleic anhydride as component A.

13. A composition as defined in claim 10, wherein the copolymers have been prepared using as component B one or more long-chain compounds with isolated olefinic double bonds selected from the group consisting of

- (1) mono- to tetraunsaturated C_{14} - C_{24} -alcohols as well as their esters with saturated C_1 - C_4 -alkyl esters, glycerol esters or polyglycerol esters,
- (2) mono- to tetraunsaturated aliphatic primary C_{14} - C_{24} -amines,
- (3) mono- to tetraunsaturated primary C_{14} - C_{24} -alcohols as well as their esters with saturated C_1 - C_4 -monocarboxylic acids,
- (4) C_{10} - C_{25} -alkyl vinyl ethers, and
- (5) terminal C_{16} - C_{24} -alkenes.

14. A composition as defined in claim 10, wherein copolymers are used which have been prepared using as component D allyl ethers of pentaerythritol, trimethylolpropane or sucrose with at least two allyl ether units in the molecule as well as allyl methacrylate, oleyl (meth)acrylate or methylenebisacrylamide.

15. A copolymer obtained by free-radical polymerization of
(A) 50 - 99.9% by weight of an olefinically unsaturated C_3 - C_5 -monocarboxylic acid, of an olefinically unsaturated C_4 - C_8 -dicarboxylic acid or of its anhydride or a mixture of such carboxylic acids or anhydrides with

(B) 0.1 - 50% by weight of one or more long-chain compounds with isolated C-C multiple bonds from the group comprising

- (1) mono- and polyunsaturated C_8 - C_{30} -monocarboxylic acids which may have additional hydroxyl groups, as well as their alkali metal and alkaline earth metal salts, alkyl esters, amides,

sorbitan esters, glycerol esters or polyglycerol esters,

(2) mono- and polyunsaturated aliphatic C₈-C₃₀-amines,

(3) mono- and polyunsaturated C₈-C₃₀-alcohols as well as their esters with saturated C₁-C₄-monocarboxylic acids,

(4) C₁₀-C₂₅-alkyl vinyl ethers.

(C) 0 - 49.9% by weight of other copolymerizable monomers and

(D) 0 - 10% by weight of one or more compounds with at least two olefinically unsaturated groups in the molecule as crosslinkers.

17. A cosmetic or pharmaceutical composition as defined in claim 10 and containing as a thickener or dispersant an effective amount of a copolymer obtained by free-radical polymerization of (A) as 50 - 99.9% by weight of an olefinically unsaturated C₃-C₅-monocarboxylic acid; (B) 0.1 - 50% by weight of one or more long-chain compounds with isolated C-C multiple bonds from the group comprising (1) mono- or polyunsaturated C₈-C₃₀-monocarboxylic acids, (2) mono- or polyunsaturated C₈-C₃₀-amines, (3) mono- or polyunsaturated C₈-C₃₀-alcohols, (4) C₁₀-C₂₅-alkyl vinyl ethers, and (5) terminal or internal C₁₆-C₃₀-alkenes; (C) 0 - 49.9% by weight of other copolymerizable monomers; and (D) 0 - 10% by weight of one or more compounds with at least two olefinically unsaturated groups in the molecule as crosslinkers.